CALFED Bay-Delta Program

Ecosystem Restoration Program Planning

Development of Implementation Objectives and Targets for Key Resources

Ecological Zone: Mainstem Rivers

Ecological Subzone: San Joaquin River (Friant Dam to Gravelly Ford)

KEY RESOURCES AND STREAM HABITATS:

Resource Guild: Native resident fish community

    Stream habitat: All life stages

    Implementation Objective: Maintain diversity of native fishes.

    Target: No numeric target.

Resource Guild: Macroinvertebrates

    Stream habitat: Larval stages.

    Implementation Objective: Maintain diverse community of macroinvertebrates.

    Target: No numeric target.

KEY ECOSYSTEM FUNCTIONS/PROCESSES AND STRESSORS:

Function/Process: Stream shading/nutrient input from riparian vegetation

    Stressor: Riparian vegetation removal reduces stream shading, nutrient input, and input of woody debris to stream.

    Implementation Objective: Restore self-sustaining diverse riparian community.

    Target: Restore _____ stream miles/acres of riparian vegetation.

    Action: Restrict further removal of riparian vegetation.

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Implement riparian restoration program.

Encourage implementation of improved land management and livestock grazing practices along stream/riparian zones.

Function/Process: Sediment Budget/Channel Morphology

Stressor: High rates of sediment input and impaired sediment transport due to altered streamflow result in accumulation of fine sediment. Channel morphology is altered by gravel extraction.

Implementation Objective: Restore balanced sediment budget.

Target: Maintain sediment input in balance with transport from the system.

Action: Provide flushing/channel maintenance flows as needed.

Facilitate transport of fine sediments by restoring the balance between river channel configuration, flow regime, and sediment supply.

Encourage implementation of improved land management and livestock grazing practices along stream/riparian zones to reduce streambank erosion and sediment input.

Work with permitting agencies to appropriately condition future gravel permits. Eliminate gravel extraction from active stream channel; strictly regulate removal from floodplain areas.

Implement stream channel restoration program.